

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

APR 2 3 2012

REPLY TO THE ATTENTION OF:

Steve Pak Air Quality Permits Section, Unit 2 Industrial Division Minnesota Pollution Control Agency 520 Lafayette Road North St. Paul, Minnesota 55155

Dear Mr. Pak:

We have reviewed the Minnesota Pollution Control Agency's (MPCA) draft/proposed Title V permit renewal and major amendment for 3M's Corporate Incinerator, located in Cottage Grove, Minnesota (permit number 16300025-002). The proposed permit is a Title V renewal with a permit amendment that allows 3M to accept additional sources of non-3M waste for incineration in their rotary kiln. The additional outside sources will provide high heating value liquid solvent waste. The facility will also be authorized to process regulated hazardous waste from Minnesota law-enforcement agencies. The specific wastes that may be received are specified in the Hazardous Waste Facility permit (MND 006 172 969).

The draft permit's allowable emissions are the following: 209 tons per year (tpy) of nitrogen oxides (NO_x), 0.125 tpy of lead, 35.4 tpy of total hazardous air pollutants (HAP), 20.1 tpy of particulate matter (PM), 95 tpy of sulfur dioxide (SO₂), 40.2 tpy of volatile organic compound (VOCs), 67 tpy of carbon monoxide (CO), 27.9 tpy of hydrochloric acid, and 15 pounds per year of mercury.

In order to ensure that the project meets Federal Clean Air Act requirements, that the permit will provide necessary information so that the basis for the permit decision is transparent and readily accessible to the public, and that the permit record provides adequate support for the decision, the U.S. Environmental Protection Agency has the following comments:

1. The Technical Support Document (TSD) describes the activities allowed by this permit action (002) as a "reissuance and a major amendment to allow additional sources of non-3M hazardous waste for incineration in the kiln." The TSD discusses the change in potential emissions from the non-3M sources of waste in terms of PM and VOCs. However, there is no information in the TSD that indicates the change in potential HAP emissions associated with the increase in incinerator of non-3M hazardous waste. Please provide additional information in the TSD, including emissions calculations, that demonstrates the change/increase in emissions attributed to the major amendment action, including individual and combined HAPs.

- 2. Potential to Emit (PTE) calculations for VOCs were completed using a weighted average molecular weight based on the measured amounts of each component from a 2001 Trial Burn. Please explain how the results from this Trial Burn, which occurred over 11 years ago, will be representative of the emissions from the proposed project, especially the regulated hazardous waste from Minnesota law enforcement agencies.
- 3. The permit must include sufficient permit conditions to address Compliance Assurance Monitoring (CAM) for Emissions Units (EU) 008. According to the statement of basis, EU008 is subject to CAM. However, no permit conditions exist in the permit that address CAM requirements. In accordance with 40 CFR §§ 64.6 through 64.9, the permit has to include the following requirements at a minimum:
 - i. A description of monitoring (what is measured, how the monitoring indicators are measured such as use of continuous digital measurement or visual observation of an analog gauge for the pressure drop, the monitoring frequency, and the averaging time);
 - ii. Definitions of an exceedance or excursion, and consequences (e.g., excursion triggering recordkeeping, corrective actions, and reporting obligations); and
 - iii. Quality Assurance/Quality Control schedules and procedures.

More information about CAM can be found in the CAM regulations in 40 CFR part 64 and http://www.epa.gov/ttnemc01/cam.html.

- 4. The CAM plan included as Attachment 1 to the TSD appears to be outdated. It makes a reference to the "next performance test to re-establish or change requirements", which was scheduled for October 2009. Presumably, this performance test has already occurred. The CAM plan should be updated to include indicator ranges, operating parameters, etc. that have been established in the most recent performance test. These parameters should also be reflected in the permit conditions for EU008.
- 5. P. A-22, EU 008, Replacement Rotating Kiln, contains a NO_x limit of less than 190 parts per million. It appears that this condition may be incorrect or incomplete or both. Please verify the correct permit condition for NO_x.
- 6. EPA recommends that MPCA consider monitoring for metals, dioxins/furans, and HAPs prior to incinerating the non-3M waste. This would give the community a sense of the background emissions for the area prior to accepting the non-3M waste.
- 7. EPA recommends that MPCA consider granting the community's request for an Environmental Assessment Worksheet, with all supporting documentation, and possibly a full Environmental Impact Statement, including a cumulative impacts analysis.
- 8. EPA recommends that MPCA consider the community's request to require 3M to install Continuous Emissions Monitors for lead and total hydrocarbons.

We appreciate the opportunity to provide comments on this proposed permit. Please feel free to contact me or Jennifer Darrow, of my staff, at (312) 886-6315 if you have any questions.

Sincerely,

Genevieve Damico

Chief

Air Permits Section